

Serial No. 10/643,915

Attorney Docket No. 11-193

REMARKS

The applicant appreciates the acknowledgement of the claim for foreign priority and the indication that all of the certified copies of the priority documents have been received.

Claims 1 – 13 are pending. The applicant respectfully requests reconsideration and allowance of this application in view of the above amendments and the following remarks.

The examiner has requested references to be provided in response to the office action, without requiring an additional search. The applicant has been made aware of the request, and no further references have been provided.

In accordance with the request in the office action, the specification has been reviewed and any minor errors noted therein have been corrected by way of the above amendment.

In the office action, claims 2, 4 and 7 are objected to. The informalities listed in the office action have been corrected in the above amended. Reconsideration and withdrawal of the objection is respectfully requested.

Claims 6 and 7 were rejected under 35 USC 112, second paragraph, as being indefinite. The designation "date/time" in claims 6 and 7 has been amended to be more precise. Support for the amendment is located in the specification, for example page 11, lines 10 – 20. Therefore, the examiner is respectfully requested to reconsider and withdraw the rejection.

Claims 1 – 7 were rejected under 35 USC 102(b) as being anticipated by U.S. Patent No. 5,802,551, Komatsu et al. ("Komatsu"). Claim 1 has been amended; support is located in the specification as filed, for example, page 6, lines 14 – 15. Insofar as the rejection may be applied to the claims as amended, the rejection is respectfully traversed for reasons including the following, which are provided by way of example.

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As described in the application, the invention is directed to solving the problem of finding, detecting, and deciding an optimum timing at which a user does not use the portable information terminal, and erasing information stored in the memory area by performing an optimization process. The optimum timing can be the execution of an automatic power off operation (claim 1), the execution of a specific statement in an application program (claim 3), or a specified date and/or time (claim 6) such as when the user is not using the portable information terminal.

Without conceding that Komatsu discloses any feature of the present invention, Komatsu is directed to a method and apparatus for controlling the writing and erasing of information in a memory device. According to Komatsu, there is provided an algorithm for optimizing information stored in an external storage device (20) such as a flash memory (25-1, ..., 25-5) for a personal computer.

The office action asserts that Komatsu discloses the invention as claimed. To the contrary, Komatsu fails to teach or suggest the invention, as presently claimed, when the claims are considered as a whole. Examples are provided below with respect to independent claims 1, 3 and 6, which are discussed separately below.

Claim 1 recites, in combination, for example, "means for executing said optimization processing ... in response to an automatic power off operation of said portable information terminal." Consequently, the optimization process for a flash memory can be executed during an automatic power off operation, in the absence of the user's operation of the device for a lapsed time period. (See page 5, line 26 – page 7, line 15; FIG. 1, FIG. 2; and step S12 in FIG. 2.)

Komatsu fails to teach or suggests, for example, the optimization process in response to the automatic power off operation. To the contrary, Komatsu discloses detecting the history of

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an optimization process during a power-on process, even if a power supply is down during an optimization process, and recovering the state of the preceding power0off in order to continue the optimization process. Therefore, Komatsu does not execute the optimization process at the time of the automatic power off.

Because Komatsu fails to teach at least these elements, independent claim 1 is patentable over Komatsu.

According to independent claim 3, the optimization process for a flash memory is executed in response to the execution of a specific statement in an application program stored at the portable information terminal. (E.g., specification page 8, lines 4 – 10.) Also, it is possible to set a condition selecting whether the optimization process (associated with the specific statement in an application program) is executed. (FIG. 5; page 10, lines 8 – 24.) For example, as illustrated in FIG. 5, it is possible to set the condition in the BASIC instruction "OUT." Thus, it is possible to set the condition whether or not the optimum operation for the flash memory is executed in various instruction statements. Such statements for example, may be unrelated to the flash memory operation, e.g., file transferring and receiving instructions as further recited in claim 5. In operation, where the optimization process is associated with a specific statement such as the file transfer/receive operation, the additional time for accomplishing the optimization process is negligible.

In contrast, according to Komatsu, the optimization process is performed together with the data reading from or writing to the flash memory.

Because Komatsu fails to teach at least these elements, it is respectfully submitted that independent claim 3 is patentable over Komatsu.

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In independent claim 6, as compared with Komatsu, the optimization process for a flash memory is executed at a designated date and/or time. (E.g., page 11, lines 10 – 20). Claim 6 recites, in combination, for example that the optimization process is automatically executed when the designated date and/or time arrives. The specification discloses that the designated date/time can be night time or similar point when the portable information terminal is likely to be dormant.

Komatsu, to the contrary, performs the optimization process in order to create a free data area in the memory, when it cannot write information over the existing information. Consequently, Komatsu does not perform optimization at a designated date and/or time.

Accordingly, Komatsu fails to teach at least these recited elements. Therefore, independent claim 6 is patentable over Komatsu.

In summary, Komatsu fails to teach or suggest, for example, these elements recited in independent claims 1, 3, and 6. It is respectfully submitted therefore that claims 1, 3 and 6 are patentable over Komatsu.

For at least these reasons, the combination of features recited in independent claims 1, 3 and 6, when interpreted as a whole, is submitted to patentably distinguish over the prior art. In addition, Komatsu clearly fails to show other recited elements as well.

With respect to the rejected dependent claims, applicant respectfully submits that these claims are allowable not only by virtue of their dependency from independent claims 1, 3, and 6, but also because of additional features they recite in combination.

New claims 8 – 13 have been added to further define the invention, and are believed to be patentable for reasons including these set out above. Support for claim 8 is located in Fig. 2, element S12. Support for claim 9 is located on page 10, lines 25 – 27 and original claim 5.

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Support for claims 10 – 11 is located in Fig. 4; and support for claims 12 – 13 is located on page 9, line 30 – page 10, line 2.

Applicant respectfully submits that, as described above, the cited prior art does not show or suggest the combination of features recited in the claims. Applicant does not concede that the cited prior art shows any of the elements recited in the claims. However, applicant has provided specific examples of elements in the claims that are clearly not present in the cited prior art.

Applicant strongly emphasizes that one reviewing the prosecution history should not interpret any of the examples applicant has described herein in connection with distinguishing over the prior art as limiting to those specific features in isolation. Rather, for the sake of simplicity, applicant has provided examples of why the claims described above are distinguishable over the cited prior art.

In view of the foregoing, the applicant submits that this application is in condition for allowance. A timely notice to that effect is respectfully requested. If questions relating to patentability remain, the examiner is invited to contact the undersigned by telephone.

If there are any problems with the payment of fees, please charge any underpayments and credit any overpayments to Deposit Account No. 50-1147.

Respectfully submitted,



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